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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/904,705	07/12/2001	Stuart E. Ralston	2240P136	4758

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EXAMINER

CHERRY, STEPHEN J

ART UNIT PAPER NUMBER

2863

DATE MAILED: 12/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/904,705

Applicant(s)

RALSTON ET AL.

Examiner

Stephen J. Cherry

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-47 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S.

Patent 6,452,544 to Hakala et al.

Claim 1 describes, as disclosed by Hakala ('544):

1. An augmented vision system comprising:
a wireless hand-held communication device to receive survey-related data
from a remote processing system via a wireless network ('544, 130);
a display processor to generate image data based on the survey-related
data ('544,120); and

a portable display device to receive the image data from the display processor and to generate an image of objects, the display device having a substantially transparent display area to superimpose the image within a field of view of a user, wherein surveyed positions of the objects are shown in relation to the display device ('544, 110, and col. 4, line 63 to col. 5, line 10 and col. 6, line 46).

Claim 2 describes, as disclosed by Hakala ('544):

2. An augmented vision system as recited in claim 1, wherein the communication device is a cellular telephone ('544, 130).

Claim 3 describes, as disclosed by Hakala ('544):

3. An augmented vision system as recited in claim 1, wherein the communication device is a personal digital assistant (PDA) ('544, col. 11, line 3).

Claim 4 describes, as disclosed by Hakala ('544):

4. An augmented vision system as recited in claim 1, wherein the display processor is coupled to the display device via a wireless link ('544, col. 5, line 35).

Claim 5 describes, as disclosed by Hakala ('544):

5. An augmented vision system as recited in claim 1, wherein the display processor is coupled to the communication device via a wireless link ('544, col. 5, line 45).

Claim 6 describes, as disclosed by Hakala ('544):

6. An augmented vision system as recited in claim 1, wherein the survey data received from the remote processing system includes real-time updates of a survey-related dataset ('544, col. 7, line 8).

Claim 7 describes, as disclosed by Hakala ('544):

7. An augmented vision system as recited in claim 1, wherein the remote processing system operates on a computer network coupled to the wireless network ('544, 160).

Claim 8 describes, as disclosed by Hakala ('544):

8. An augmented vision-system as recited in claim 7, wherein the computer network comprises the Internet and the wireless network comprises a cellular communications network ('544, col. 5, lines 33-54).

Claim 9 describes, as disclosed by Hakala ('544):

9. An augmented vision system as recited in claim 7, wherein the communication device includes a web browser and the remote processing system includes a web server, such that the survey-related data is received from the remote processing system in response to a request by the user transmitted using the web browser ('544, col. 6, line 9 discloses "it is possible for user to pick and choose another map server which can provide his or her map information", the map server, 170, coupled to the internet, is interpreted as the web server, and the software that allows the user to pick and choose map information is interpreted as web browser).

Claim 10 describes, as disclosed by Hakala ('544):

10. An augmented vision system as recited in claim 1, wherein the survey-related data is pushed by the remote processing system to the communication device without a specific request for said data by the user ('544, col. 7, line 7 describes real time implementation, the changes that occur in real time would not be known to a user, thus they are inherently initiated without a user request).

Claim 11 describes, as disclosed by Hakala ('544):

11. An augmented vision system as recited in claim 1, wherein the image comprises an image of a natural or manmade object visible within the field of view of the user ('544, col. 6, line 46 to col. 7, line 10).

Claim 12 describes, as disclosed by Hakala ('544):

12. An augmented vision system comprising:
a wireless hand-held communication device to receive survey-related data from a remote server on a wired network, via a wireless network ('544, 130);
a display processor to generate stereoscopic image data based on the received survey-related data ('544, 120); and
a display device, wearable by a user, to receive the image data from the display processor and to generate stereoscopic images, the display device having a substantially transparent display area to superimpose the stereoscopic images of natural or manmade objects visible within the field of view of the user, wherein surveyed positions of the objects are shown in

relation to the display device ('544, 110, and col. 4, line 63 to col. 5, line 10).

Claim 13 describes, as disclosed by Hakala ('544):

13. An augmented vision system as recited in claim 12, wherein the communication device is a cellular telephone ('544, 130).

Claim 14 describes, as disclosed by Hakala ('544):

14. An augmented vision system as recited in claim 12, wherein the communication device is a personal digital assistant (PDA) ('544, col. 11, line 3).

Claim 15 describes, as disclosed by Hakala ('544):

15. An augmented vision system as recited in claim 12, wherein the display processor is coupled to the display device via a wireless link ('544, col. 5, line 35).

Claim 16 describes, as disclosed by Hakala ('544):

16. An augmented vision system as recited in claim 12, wherein the display processor is coupled to the communication device via a wireless link ('544, col. 5, line 45).

Claim 17 describes, as disclosed by Hakala ('544):

17. An augmented vision system as recited in claim 12, wherein the survey data received from the remote server includes real-time updates of a survey-related dataset ('544, col. 7, line 8).

Claim 18 describes, as disclosed by Hakala ('544):

18. An augmented vision system as recited in claim 12, wherein the wireless network comprises a cellular telephony network ('544, col. 5, line 38).

Claim 19 describes, as disclosed by Hakala ('544):

19. An augmented vision system as recited in claim 12, wherein the communication device includes a web browser, wherein the remote server comprises a web server, such that the user requests the survey-related data from the remote server using the web browser ('544, col. 6, line 9 discloses "it is possible for user to pick and choose another map server which can provide his or her map information", the map server, 170, coupled to the internet, is interpreted as the web server, and the software that allows the user to pick and choose map information is interpreted as web browser).

Claim 20 describes, as disclosed by Hakala ('544):

20. An augmented vision system as recited in claim 12, wherein the survey-related data is pushed by the remote server to the communication device without a specific request for said data by the user ('544, col. 7, line 7 describes real time implementation, the changes that occur in real time would not be known to a user, thus they are inherently initiated without a user request).

Claim 21 describes, as disclosed by Hakala ('544):

21. An augmented vision system as recited in claim 12, further comprising an input device to receive input from the user ('544, figs. 1C, and 5A).

Claim 22 describes, as disclosed by Hakala ('544):

22. An augmented vision system as recited in claim 21, wherein the image data is generated in response the input from the user ('544, col. 6, line 9).

Claim 23 describes, as disclosed by Hakala ('544):

23. An augmented vision system as recited in claim 21, wherein the input device is part of the communications device ('544, 130, cellular telephone inherently includes an input device).

Claim 24 describes, as disclosed by Hakala ('544):

24. An augmented vision system as recited in claim 21, wherein the input device comprises a virtual control object ('544, col. 9, line 14).

Claim 25 describes, as disclosed by Hakala ('544):

25. An augmented vision system comprising:
a wireless hand-held communication device to receive survey-related data associated with a current position of a user from a remote server on the Internet, via a wireless network ('544, 130);
an input device to receive input from the user ('544, figs. 1C, and 5A);
a display processor to generate stereoscopic image data in response to the input from the user based on the survey-related data ('544,120); and
a display device wearable by the user, to receive the image data from the display processor via a wireless link to generate stereoscopic images, the

display device having a substantially transparent display area to superimpose the stereoscopic images of objects on a field of view of the user, wherein surveyed positions of the objects are shown in relation to the display device ('544, 110, and col. 4, line 63 to col. 5, line 10).

Claim 26 describes, as disclosed by Hakala ('544):

26. An augmented vision system as recited in claim 25, further comprising: a positioning system to precisely determine the position of the user ('544, fig. 2, 220-221); and a head orientation device to determine a current head orientation of the user ('544, col. 5, line 12).

Claim 27 describes, as disclosed by Hakala ('544):

27. An augmented vision system as recited in claim 26, wherein the display processor generates the stereoscopic image data based on the survey-related data, the current position of the user, and the current head orientation of the user ('544, col. 4, line 37).

Claim 28 describes, as disclosed by Hakala ('544):

28. An augmented vision system as recited in claim 25, wherein the communication device is a cellular telephone ('544, 130).

Claim 29 describes, as disclosed by Hakala ('544):

29. An augmented vision system as recited in claim 25, wherein the communication device is a personal digital assistant (PDA) ('544, col. 11, line 3).

Claim 30 describes, as disclosed by Hakala ('544):

30. An augmented vision system as recited in claim 25, wherein the survey data received from the remote server includes real-time updates of a survey-related dataset ('544, col. 7, line 8).

Claim 31 describes, as disclosed by Hakala ('544):

31. An augmented vision system as recited in claim 25, wherein the wireless network comprises a cellular telephony network ('544, col. 5, line 38).

Claim 32 describes, as disclosed by Hakala ('544):

32. An augmented vision system as recited in claim 25, wherein the communication device comprises a web browser and the remote server comprises a web server, such that the user requests the survey-related data from the remote server using the web browser ('544, col. 6, line 9 discloses "it is possible for user to pick and choose another map server which can provide his or her map information", the map server, 170, coupled to the internet, is interpreted as the web server, and the software that allows the user to pick and choose map information is interpreted as web browser).

Claim 33 describes, as disclosed by Hakala ('544):

33. An augmented vision system as recited in claim 25, wherein the survey-related data is pushed by the remote server to the communication device without said data having been explicitly requested by the user ('544, col. 7, line 7 describes real time implementation, the changes that

occur in real time would not be known to a user, thus they are inherently initiated without a user request).

Claim 34 describes, as disclosed by Hakala ('544):

34. An augmented vision system as recited in claim 25, wherein the input device is part of the communications device ('544, 130, cellular telephone inherently includes an input device).

Claim 35 describes, as disclosed by Hakala ('544):

35. An augmented vision system as recited in claim 25, wherein the input device comprises a virtual control object ('544, col. 9, line 14).

Claim 36 describes, as disclosed by Hakala ('544):

36. An augmented vision system as recited in claim 25, wherein the images of objects comprise images of natural or manmade objects visible within the field of view of the user ('544, col. 6, line 46 to col. 7, line 10).

Claim 37 describes, as disclosed by Hakala ('544):

37. An augmented vision system comprising:
a wireless hand-held communication device to receive survey-related data from a remote computer system via a wireless network ('544, 130); means for receiving the survey-related data from the communication device via a wireless link ('544, col. 5, line 35); means for generating stereoscopic image data based on the survey-related data ('544, 120); and means for displaying stereoscopic images to a user based on the image data, including means for superimposing, on a field of view of the user,

stereoscopic images of natural or manmade objects visible within the field of view ('544, 110, and col. 4, line 63 to col. 5, line 10).

Claim 38 describes, as disclosed by Hakala ('544):

38. An augmented vision system as recited in claim 37, wherein the communication device is a cellular telephone ('544, 130).

Claim 39 describes, as disclosed by Hakala ('544):

39. An augmented vision system as recited in claim 37, wherein the communication device is a personal digital assistant (PDA) ('544, col. 11, line 3).

Claim 40 describes, as disclosed by Hakala ('544):

40. An augmented vision system as recited in claim 37, wherein the survey data includes real-time updates of a survey-related dataset ('544, col. 7, line 8).

Claim 41 describes, as disclosed by Hakala ('544):

41. An augmented vision system as recited in claim 37, wherein the wireless network comprises a cellular telephony network ('544, col. 5, line 38).

Claim 42 describes, as disclosed by Hakala ('544):

42. An augmented vision system as recited in claim 37, wherein the communication device includes a web browser, wherein the remote computer system comprises a web server, such that the user requests the survey-related data from the remote computer system using the web

browser ('544, col. 6, line 9 discloses "it is possible for user to pick and choose another map server which can provide his or her map information", the map server, 170, coupled to the internet, is interpreted as the web server, and the software that allows the user to pick and choose map information is interpreted as web browser).

Claim 43 describes, as disclosed by Hakala ('544):

43. An augmented vision system as recited in claim 37, wherein the survey-related data is pushed by the remote computer system to the communication device without an explicit request for said data by the user ('544, col. 7, line 7 describes real time implementation, the changes that occur in real time would not be known to a user, thus they are inherently initiated without a user request).

Claim 44 describes, as disclosed by Hakala ('544):

44. An augmented vision system as recited in claim 37, further comprising means for receiving input from the user, wherein the image data is generated in response the input from the user ('544, figs. 1C, and 5A).

Claim 45 describes, as disclosed by Hakala ('544):

45. A method of facilitating survey operations, the method comprising: using a wireless hand-held communication device to receive survey-related data from a remote computer system via a wireless network ('544, fig. 1, 130);

transmitting the received survey-related data from the communication device over a wireless link to a second device ('544, col. 5, line 35); generating stereoscopic image data in the second device based on the survey related data transmitted over the wireless link ('544, col. 4, line 37); and displaying on the second device stereoscopic images to a user based on the image data, including superimposing, on a field of view of the user, stereoscopic images of natural or manmade objects visible within the field of view, wherein surveyed positions of the objects are shown in relation to the second device ('544, col. 4, line 37).

Claim 46 describes, as disclosed by Hakala ('544):

46. A method as recited in claim 45, further comprising, prior to said using a wireless hand-held communication device, requesting the survey-related data from the remote computer system using a web browser ('544, col. 6, line 9 discloses "it is possible for user to pick and choose another map server which can provide his or her map information", the map server, 170, coupled to the internet, is interpreted as the web server, and the software that allows the user to pick and choose map information is interpreted as web browser).

Claim 47 describes, as disclosed by Hakala ('544):

47. A method as recited in claim 45, further comprising receiving input from the user, wherein said generating stereoscopic image data is in response to the input from the user ('544, col. 9, line 51).

Response to Arguments

Applicant's arguments regarding claims 1-47, filed 10-17-03 have been fully considered but they are not persuasive.

Applicant states that Hakala does not teach receiving or processing survey related data.

Hakala discloses a system and method that superimposes, in perspective, images of objects of known position on the view of images seen by eyes of an operator by sensing the orientation and position of the operator ('544, col. 6, line '544). The method used to measure the position of the object is considered a survey.

Conclusion

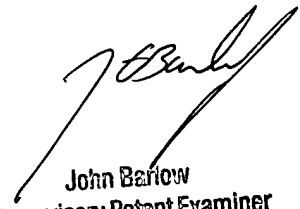
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Cherry whose telephone number is (703) 305-0425. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (703) 308-3126. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9318.

Art Unit: 2863

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0719.

SJC



John Barlow
Supervisory Patent Examiner
Technology Center 2800